odds model has a natural interpretation of the treatment effect, is flexible in terms of handling data with different numbers of categories, but relies on the proportional odds assumption. The ordered logistic model also has a natural interpretation of the treatment effect, but increases in complexity when handling data with a large number of categories. The multinomial model's interpretation for the treatment effect is difficult, but it can model a large number of categories and can handle unordered competing risks and time dependent data. **CONCLUSIONS:** There are three methods for incorporating multinomial data in a meta-analysis framework with various advantages and disadvantages. Selection of the appropriate model appears to be most dependent on the characteristics of the dataset. We determine that there is sufficient cause for future research focusing on a quantitative comparison of these different methods.

PRM13

EASING DECISION-MAKING BY EXPANDING METHODS OF MULTIPLE TREATMENT COMPARISON META-ANALYSIS – INCORPORATING NON-COMPARATIVE STUDIES VIA INFORMATIVE PRIORS

Thorlund K[1], Kanters S[2], Mills E[3]

[1]*McMaster University, Hamilton, ON, Canada,* [2]*University of British Columbia, Vancouver, BC, Canada,* [3]*Stanford University, Palo Alto, CA, USA*

OBJECTIVES: While multiple treatment comparisons (MTC) generally provide strong evidence, many are accompanied with uncertainty that makes life challenging for decison makers. Seeking reduction in uncertainty from non-comparative trial can ease decision-making, but the validity of this approach must be tested. Using an example of treatments for cryptococcal meningitis (CM), our objective was to assess the value and validity of incorporating non-comparative trial evidence via prior distributions in the Bayesian MTC framework. **METHODS:** We conducted a Bayesian MTC meta-analysis with and without informative priors and reported odds ratios (OR) with 95% credible intervals (CrI). Non-comparative data were incorporated in a two-stage approach. First meta-analysis for proportions was used to pool all relevant non-comparative outcomes for each treatment. Second, these results were used to construct informative priors for the comparative treatment effect parameters (the log odds ratios) in the Bayesian MTC. Treatments considered were amphotericin (AmB)-based therapy coupled with either flucytosine (5FC) or fluconazole (Azole). **RESULTS:** Twenty-seven studies (N=1,938), 15 head-to-head drug comparison trials and 12 studies evaluating a single drug, described early mortality. Twenty-nine studies, 17 head-to-head and 12 single-arm studies, described late mortality. Incorporating non-comparative trials via informative priors improved the precision of several comparisons. For early mortality for example, the OR for AmB+Azole vs AmB+5FC was 0.26 (95%CrI 0.04-1.26) with a conventional MTC, and 0.24 (0.04-0.98) with informative priors. Use of informative priors reduced the DIC by 38% and the heterogeneity by 28%, indicating a better model fit. Moreover, evidence from the non-comparative studies was coherent with the randomized evidence, adding to the validity of the approach. **CONCLUSIONS:** Incorporating non-comparative studies as informative priors in Bayesian MTCs appears a viable approach for reducing the uncertainty in MTCs, and thus easing decision making.

PRM14

DEVELOPMENT OF THE SCHIZOPHRENIA CAREGIVER QUESTIONNAIRE: MODIFICATION OF THE ZARIT BURDEN INTERVIEW INFORMED BY QUALITATIVE INSIGHTS

Gater A[1], Rofail D[2], Tolley C[1], Marshall C[1], Abetz-Webb L[1], Zarit SH[3], Galani Berardo C[4]

[1]*Adelphi Values, Bollington, UK,* [2]*Roche Products Ltd., Welwyn Garden City, UK,* [3]*Pennsylvania State University, University Park, PA, USA,* [4]*F. Hoffmann-La Roche LTD., Basel, Switzerland*

OBJECTIVES: Understanding the impact of caring for a person with schizophrenia on caregivers' lives and emotional and physical well-being is of increasing interest for health care decison makers. The Zarit Burden Interview (ZBI) is an established measure of caregiver impact for Alzheimer's disease. Face and content validity of the ZBI have not yet been established in schizophrenia and were explored in this study based on qualitative insights from caregivers of people with schizophrenia. **METHODS:** A targeted literature review and consideration of best practice guidelines for development of self-report questionnaires informed initial ZBI modifications. Face and content validity of the newly labelled Schizophrenia Caregiver Questionnaire (SCQ) were assessed via comprehensive semi-structured interviews with a diverse range of 19 US caregivers of people with schizophrenia. Interviews were initially open-ended and explored caregivers' experience of caring for a person with schizophrenia (concept elicitation). Cognitive debriefing of the draft SCQ then assessed relevance and understanding. **RESULTS:** Initial review of the ZBI informed changes to item wording, recall period, and response scales to improve face validity. The qualitative literature review and concept elicitation interviews informed ten additional items assessing concepts important to caregivers, not included in the ZBI: tiredness, stress, disturbed sleep, sadness, medication administration issues, worries about future episodes, worsening symptoms, frustration, emotional highs and lows, and impact on work. Following cognitive debriefing interviews, five items were modified to improve relevance and understanding; otherwise, caregiver feedback supported the content validity and comprehensiveness of the resulting SCQ. **CONCLUSIONS:** SCQ demonstrated good face and content validity for the assessment of caregiver impact in schizophrenia and is a promising tool for communication of caregiver outcomes to health care decision makers. Tiredness, disturbed sleep and sadness are included in depression scales hence there may be overlap if depression is assessed). Further work determining final SCQ content/scoring and psychometric properties is ongoing.

PRM15

USING AN EXCEL CALCULATOR TO ESTIMATE ANKYLOSING SPONDYLITIS COSTS IN TURKEY

Baser O[1], Burkan A[2], Baser E[3], Koselerli R[2], Ertugay E[2], Altinbas A[4]

[1]*STATinMED Research/The University of Michigan, Ann Arbor, Michigan, MI, USA,* [2]*Social Security Institution, Ankara, Turkey,* [3]*STATinMED Research, Ankara, Turkey,* [4]*Diskapi Yildirim Beyazi Education and Research Hospital, Gastroenterology Clinic, and STATinMED Research, Ankara, Turkey*

OBJECTIVES: To build an Excel calculator, including demographic and clinical characteristics of Ankylosing Spondylitis (AS) patients, and estimate annual health care costs of AS patients in Turkey. **METHODS:** The study data was obtained from the Turkish national health insurance database, MEDULA (2009-2011). Adult AS patients (ages 18-99) were identified for the identification period (June 1, 2010 - December 31, 2010) through the use of International Classification of Disease Tenth Revision Clinical Modification (ICD-10-CM) codes. Patients were required to have two AS diagnoses at least 60 days apart, with at least 1 year of continuous health plan enrollment for the baseline and follow-up years. Patients were grouped as prevalent and incident cases, and generalized linear models (GLMs) were used to estimate risk-adjusted total annual costs for prevalent and incident cases. The expected annual cost value was based on patient demographic and clinical characteristics. Coefficients of patients' demographic and clinical characteristics were built in the Excel calculator. Using the calculation, a marginal effects table was created after GLM estimation. **RESULTS:** A total of 2986 patients met all inclusion criteria (603 incident; 2383 prevalent patients). Demographic and clinical characteristics of the patients were entered into the Excel calculator. Risk-adjusted annual total costs were calculated as €3307 for prevalent cases and €2000 for incident cases. Prior biologic use significantly contributed to total medical costs for both prevalent and incident AS patients ($p<0.001$). For incidence cases, the cost of care was lower for the 18-39 age group when controlling for other factors. For prevalent cases, there were no differences in health care costs in terms of region, gender, age, comorbidities, or prior non-steroidal anti-inflammatory drug (NSAID) or disease-modifying anti-rheumatic drug (DMARD) use. **CONCLUSIONS:** An Excel calculator is an important tool to estimate and compare AS-related health care costs in outcomes research.

PRM16

DERIVATION OF SEVERITY INDEX FOR RHEUMATOID ARTHRITIS

Baser O[1], Baser E[2], Altinbas A[3], Burkan A[4]

[1]*STATinMED Research/The University of Michigan, Ann Arbor, Michigan, MI, USA,* [2]*STATinMED Research, Ankara, Turkey,* [3]*Diskapi Yildirim Beyazi Education and Research Hospital, Gastroenterology Clinic, and STATinMED Research, Ankara, Turkey,* [4]*Social Security Institution, Ankara, Turkey*

OBJECTIVES: To derive a claims-based severity index for rheumatoid arthritis (SIFRA) and examine its impact on prevalent rheumatoid arthritis (RA) patients in Turkey. **METHODS:** Using the Turkish national health insurance database MEDULA (01JUN2009-31DEC2011), prevalent RA patients were identified. Patients were required to be age 18-99, have two RA diagnoses ≥60 days apart and be continuously enrolled 1 year pre- (baseline period) and post-index date (follow-up), which was the first RA claim during the identification period (01JUN2010-31DEC2010). The SIFRA score was derived for each patient. RA-related indicators were sub-grouped as clinical and functional status, extra-articular manifestations, surgical history and medications. The strength of each relationship was measured from 0=no relationship to 6=perfect relationship, and assessed by six board-certified, clinically active rheumatologists according to the Delphi panel method. The index was previously validated and applied to the U.S. Department of Veteran Affairs, Veterans Health Administration (VHA) data. **RESULTS:** For the total of 1,920 identified RA patients, SIFRA scores ranged between 0 and 69.40, with a mean value of 14.21, and a standard deviation (SD) of 10.26. Mean SIFRA scores were 7.05 (49.57%), which consisted of clinical and functional status variables, followed by 6.32 (44.47%) for medications, 0.48 (3.40%) for radiology and laboratory findings, 0.32 (2.25%) for extra-articular manifestations (pulmonary nodules, subcutaneous nodules, vasculitis ever, Felty's syndrome ever), and 0.04 (0.31%) for surgical history (cervical spine fusion, hand/foot joint replacement, foot joint/ankle/wrist fusion, total hip/knee/elbow/shoulder replacement). **CONCLUSIONS:** SIFRA demonstrated evidence of being a significant determinant for health care costs and biologic therapy use. This study suggests that SIFRA could be an important methodological tool to control for severity in RA-related outcomes research. Any comparative effectiveness studies in RA treatment should include severity scores in the analysis.

PRM17

PHYSICIAN PANELS SUPPORTING CLINICAL TRIALS AND POST-APPROVAL STUDIES IN ONCOLOGY: A WILLINGNESS-TO-PARTICIPATE STUDY

Potthoff P[1], Brown C[2], Güther B[3], Eichmann F[3]

[1]*Kantar Health GmbH, München, Germany,* [2]*All Global, London, UK,* [3]*Kantar Health Germany, Munich, Germany*

OBJECTIVES: Clinical oncology research projects require participation of oncologists and/or hematologists to recruit patients and/or assess clinical outcomes. A variety of methods is used to recruit office or hospital based physicans. Specifically for studies with an epidemiological aspect, the study should not rely on the typical clinical expert sites, thus, alternative recruitment pathways are increasingly considered. The objective of our study was thus to assess the benefits of using physician panels for site recruitment. **METHODS:** In 2012, a representative survey among members of a managed physician panel (All Global's managed panel of oncologists and hematologists in US, UK, GER, FR, IT and SP) was conducted. A Sample of oncologists and hematologists was selected. The panel was stratified by country and within the strata physicians were randomly selected. 335 out of 1.303 oncologists and hematologists in the sample (25,7%) reported about their former experience with clinical trials and post-approval studies, their willingness to participate in future studies and their adherence to aspects of GCP rules. **RESULTS:** A total of 284 (84,7%) of the physicians have formerly participated in clinical trials and 276 (67,2%) in post-approval studies. A total of 88,9% of the experienced oncologists and hematologists were willing to participate in future studies. More than 80% of this group was ready to be named as principal investigator to an ethical committee, to report serious adverse events to the sponsor of the study and to ask patients for written informed consent. No substantial difference between countries was detected. **CONCLUSIONS:** Since no special incentive was offered for participation the response rate was satisfactory Managed oncologist panels are a cost-effective,